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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,234	12/18/2001	Robert W. Stadler	P-9888.00	3742
27581	7590	05/23/2005		
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MS-LC340 MINNEAPOLIS, MN 55432-5604				
			EXAMINER MANUEL, GEORGE C	
			ART UNIT 3762	PAPER NUMBER

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No. 10/023,234	Applicant(s) STADLER ET AL.	
	Examiner George Manuel	Art Unit 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-55 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Larnard et al '772.

Larnard et al discloses a processor 19 having a normal processing mode (see 101 for normal sinus rhythm data) for benign heart rhythm comprising a normal sinus rhythm and a guarded processing mode responsive to a non-benign heart rhythm comprising classifying cardiac events as bradycardia or tachycardia. Event/Peak detection 103, interval and morphology calculations 104 provide means for switching from the normal processing mode to a guarded processing mode and event and rhythm classifications 105 and 106 provide discriminatory arrhythmia classification algorithms.

Regarding claims 5, 7, 13, 17, 20, 26, 45 and 52, the evidence of atrial flutter is provided by the detection circuitry of the atrial data path 170 of the algorithm which performs an event and peak detection determination at 171 and then loads the time of the atrial P-wave peak into an atrial buffer at 172.

Regarding claims 37-41 sensing electrodes 11 provides first and second sensors. Pacing therapy is delivered from the action module 20 to the atrial and ventricular sensing and pacing leads 11 and 12 by means of a bus 21.

Applicant's remarks filed, 4/5/05 that Larnard does not teach operation of a processor in a normal and in a guarded mode is without merit. Larnard clearly shows a processor 19 capable of normal and guarded mode operation.

Applicant's specification defines a "normal" mode of operation: *In normal processing mode, the device performs a comparatively simple rhythm analysis that is not computationally demanding and consumes relatively little energy.*

Larnard et al teach bradycardia therapy and tachycardia therapy use energy shock to restore normal sinus rhythm. Under normal sinus rhythm little energy is consumed. Further, determining a threshold value for normal sinus rhythm is a comparatively simple rhythm analysis and also consumes relatively little energy. See col. 6, line 62 to col. 7, line 14.

Applicant's specification defines a "guarded" mode of operation: *In guarded processing mode, the highly discriminatory but computationally demanding arrhythmia classification is activated and therapy may be delivered if appropriate.*

Larnard et al teach discriminating arrhythmias using a programmable event algorithm 105 and a computationally demanding arrhythmia classification algorithm 106 and delivering an appropriate therapy. See col. 2, line 51 to col. 3, line 5.

Therefore, Larnard et al teach more than an algorithm and the examiner's interpretation is reasonable.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Manuel whose telephone number is (703) 308-2118.

  
George Manuel  
Primary Examiner  
Art Unit: 3762

5/19/05